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EXAMINER

NGUYEN, MINH DIEU T

ART UNIT. PAPER NUMBER

2137

DATE MAILED: 05/19/2004

8

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/631,270

Applicant(s)

CARPENTER ET AL.

Examiner

Minh Dieu Nguyen

Art Unit

2137

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☐ Responsive to communication(s) filed on ____.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-110 is/are pending in the application.
- 4a) Of the above claim(s) ____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) ____ is/are allowed.
- 6) ☒ Claim(s) 1-12, 14, 16, 18, 20 and 22-110 is/are rejected.
- 7) ☒ Claim(s) 13, 15, 17, 19 and 21 is/are objected to.
- 8) ☐ Claim(s) ____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on ____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. ____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- ☒ Notice of References Cited (PTO-892)
- ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date ____.
- ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. ____.
- ☐ Notice of Informal Patent Application (PTO-152)
- ☐ Other: ____.

DETAILED ACTION

Response to Amendment

1. The amendment A file on March 08, 2004 has been entered and fully considered.
Claims 1-11 have been amended and claims 12-110 have been added.

Claim Rejections - 35 USC § 112

2. The following is a quotation of the first paragraph of 35 U.S.C. 112:

The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

3. Claims 22-110 are rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the written description requirement. The claim(s) contains subject matter which was not described in the specification in such a way as to reasonably convey to one skilled in the relevant art that the inventor(s), at the time the application was filed, had possession of the claimed invention.

“retransferring the fingerprinted...”; “generating the source content...” and “retransferring the source...” are not properly described in the application.

Claim Rejections - 35 USC § 103

4. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

5. **Claims 1-11, 12, 14, 16, 18 and 20** are rejected under 35 U.S.C. 103(a) as being unpatentable over Stebbings, US Patent 6,684,199 in view of Aucsmith, US 6,148,407.

a) **As to claim 1**, Stebbings discloses a method and system for preventing piracy and/or unauthorized copying of data from a data source. The method comprises:

- determining a unique fingerprint from the source storage medium (col. 20, lines 37-40, predetermined errors, which read on unique fingerprint, are configured as authentication means)
- combining the content to be secured with the source fingerprint to generate the fingerprinted content (Figure 11)
- instructing the source medium to store the complete data frame which reads on the fingerprinted content (Figure 11).

However he fails to disclose the source fingerprint is a physical attribute of the source storage medium.

Aucsmith discloses a method and apparatus for producing computer-platform fingerprints. This "fingerprinting" process is formed by a set of trait values available from components which is actually present in the system (col. 2, lines 60-65; col. 3, lines 42-44) and the fingerprint is a physical attribute of the source storage medium (col. 4, lines 9-11 and is used as authentication means).

It would have been obvious to one of ordinary skill in the art at the time of the invention to employ the use of physical attribute of the source storage medium as source fingerprint, as Aucsmith teaches, in the system of Stebbings so as to strengthen data security in the system.

b) **As to claim 2**, Stebbings discloses a method further comprising the step of a host processor reading and verifying the fingerprinted content:

- reading the fingerprinted content from a compact disc (Fig. 13, element 50)
- separating the source content to be secured from the source fingerprint (Fig. 13, step 56)
- requesting a local fingerprint from the local medium (Fig. 13, step 59)
- comparing the local fingerprint with the source fingerprint and in response to the comparison determining whether to use the source content (Fig. 13, step 61)

c) **As to claims 3 and 6**, Stebbings discloses the step of requesting a source fingerprint comprising:

- using an open protocol to request a secured communication from the source medium (Figure 22)
- identifying a predetermined errors (fingerprint) which reads on characteristic associated with the source medium (col. 20, lines 37-40). Stebbings does not disclose the physical, statistically unique, verifiable and relatively immutable (PSUVI) characteristics and non PSUVI characteristics (claims 3 and 6 respectively)
- generating at least one of encryption and decryption keys (col. 20, lines 38-40)
- using the encryption key to convert the source content to an encrypted protocol (Figure 13, element 60)
- requesting from the source medium the PSUVI or non PSUVI (claims 3 and 6 respectively) fingerprint characteristic (Figure 14, element 78) and responding to the host with PSUVI or non-PSUVI fingerprint

Aucsmith discloses a method and apparatus for producing computer platform fingerprints. This "fingerprinting" process is formed by a set of trait values, which classified into a constant trait which reads on PSUVI characteristic (Figure 5) and a membership trait which reads on non-PSUVI characteristic (Figure 6).

~~It would have been obvious to one of ordinary skill in the art at the time of the~~
invention to employ the use of defining these classes of characteristics, as Aucsmith teaches, in the system of Stebbings so as to effectively protect data security in each characteristic system.

d) **As to claim 4**, Stebbings discloses a method and system for preventing piracy and/or unauthorized copying of data from a data source (col. 1, lines 16-24)

Stebbing discloses the step of combining the data which reads on source content and predetermined errors which reads on source fingerprint to generate the hybrid content and encrypting the hybrid content with an encryption key (Figure 11, col. 20, lines 35-67, col. 21, lines 1-4).

e) **As to claims 5 and 7**, Stebbings discloses the step of requesting a local fingerprint from the local storage medium further comprising:

- requesting from the local storage medium a local fingerprint PSUVI and non-PSUVI characteristic (claims 5 and 7 respectively) (Figure 14, element 78). Stebbings does not disclose the physical, statistically unique, verifiable and relatively immutable (PSUVI) characteristic and non PSUVI characteristic
- replying to the host processor with the local fingerprint PSUVI and non-PSUVI and performing a secured verification of the local

~~fingerprint-PSUVI and non-PSUVI (claims 5 and 7 respectively)~~

(Figure 16)

Aucsmith discloses a method and apparatus for producing computer platform fingerprints. This "fingerprinting" process is formed by a set of trait values, which classified into a constant trait which reads on PSUVI characteristic (Figure 5) and a membership trait which reads on non-PSUVI characteristic (Figure 6).

It would have been obvious to one of ordinary skill in the art at the time of the invention to employ the use of defining these classes of characteristics, as Aucsmith teaches, in the system of Stebbings so as to effectively protect data security in each characteristic system.

f) **As to claims 8 and 9**, Stebbings discloses a system for minimizing pirating and/or unauthorized copying and/or unauthorized access of/to data on/from data media comprising a host processor (Figure 18) and a storage medium, the storage medium comprising a storage medium processor (col. 24, lines 27-32), a host processor interface, a servo system, a read/write system, one of more storage disks and attribute detector to read storage disc characteristic (Figures 12 and 19).

Stebbing does not disclose the physical, statistically unique, verifiable and relatively immutable (PSUVI) characteristic and non PSUVI characteristic from the one or more storage disks to use by the host processor to encrypt a content to be secured.

Aucsmith discloses a method and apparatus for producing computer platform fingerprints. This "fingerprinting" process is formed by a set of trait values, which

classified into a constant trait which reads on PSUVI characteristic (Figure 5) and a membership trait which reads on non-PSUVI characteristic (Figure 6), (claims 8 and 9 respectively).

It would have been obvious to one of ordinary skill in the art at the time of the invention to employ the use of defining these classes of characteristics, as Aucsmith teaches, in the system of Stebbings so as to effectively protect data security in each characteristic system.

g) **As to claims 10 and 11**, Stebbings discloses a fingerprinted content comprises a content to be secured combined with a fingerprint generated from a characteristic of the storage medium (Figure 11, element 21). However, Stebbings does not disclose the physical, statistically unique, verifiable and relatively immutable (PSUVI) characteristic and non PSUVI characteristic of the storage medium.

Aucsmith discloses a method and apparatus for producing computer platform fingerprints. This "fingerprinting" process is formed by a set of trait values, which classified into a constant trait which reads on PSUVI characteristic (Figure 5) and a membership trait which reads on non-PSUVI characteristic (Figure 6), (claims 10 and 11 respectively).

It would have been obvious to one of ordinary skill in the art at the time of the invention to employ the use of defining these classes of characteristics, as Aucsmith teaches, in the system of Stebbings so as to effectively protect data security in each characteristic system.

h) **As to claims 12, 14, 16, 18 and 20**, the examiner takes official notice that use of hard disk drive for storing information is quite well known in the computer system.

Allowable Subject Matter

6. Claims 13, 15, 17, 19 and 21 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

Response to Arguments

Stebbing and Aucsmith have been cited to address the new amended claims, applicant's remarks regarding the source fingerprint is a physical attribute of the source storage medium are acknowledged in Stebbings and Aucsmith.

Stebbing discloses predetermined errors are configured as authentication means (Fig. 10, element 23), Aucsmith discloses fingerprint, physical attribute of the source storage medium (Fig. 2, element 250), is also used as an authentication means (Fig. 1). Both Stebbings and Aucsmith discloses a method and apparatus for identification/authentication, however, Stebbings fails to teach predetermined errors as physical attribute of the source storage medium. Aucsmith discloses source fingerprint from the source storage medium as a physical attribute of the source storage medium. The proposed modification would enhance data security protection.

Conclusion

7. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

US 2002/0010864 to Safa discloses transaction verification.

8. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than **SIX MONTHS** from the date of this final action.

9. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Minh Dieu Nguyen whose telephone number is 703-305-9727. The examiner can normally be reached on M-F 6:00-2:30.

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If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Greg Morse can be reached on 703-308-4789. The fax phone number for the organization where this application or proceeding is assigned is (703) 872-9306.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is 703-305-3900.

mdn
mdn
5/17/04

Minh Dieu Nguyen
Examiner
Art Unit 2137

Greg Morse
GREGORY MORSE
SUPERVISORY PATENT EXAMINER
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